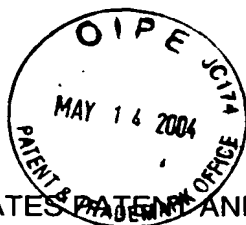


Docket Number: 081468-0309173
Client Reference: P-1583.010-US



IFW
PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of

DE SMIT et al.

Group Art Unit:

Application No.: 10/820,227

Examiner: Unassigned

Filed: April 8, 2004

Confirmation No.: Unassigned

For: LITHOGRAPHIC APPARATUS AND DEVICE MANUFACTURING METHOD

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. 1.56, the attention of the Patent and Trademark Office is hereby directed to the following U.S. patent application(s):

Examiner's Initials	First Inventor	Application No.	Filing Date	Enclosed
	DIERICHS (081468-0308270)	10/775,326	02/11/2004	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card
	DUINEVELD et al. (081468-0308101)	10/773,461	02/09/2004	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card
	FLAGELLO et al. (081468-0302644)	10/698,012	10/31/2003	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card
	DE SMIT et al. (081468-0306530)	10/705,804	11/12/2003	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card
	LOF et al. (081468-0306781)	10/705,805	11/12/2003	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card
	LOF et al. (081468-0306524)	10/705,783	11/12/2003	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card
	VAN SANTEN et al. (081468-0307331)	10/743,271	12/23/2003	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card
	MULKENS et al. (081468-0307333)	10/743,266	12/23/2003	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card
	DERKSEN et al. (081468-0306526)	10/705,785	11/12/2003	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card
	SIMON et al. (081468-0307087)	10/724,402	12/01/2003	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card



Examiner's Initials	First Inventor	Application No.	Filing Date	Enclosed
	BLEEKER (081468-0306527)	10/715,116	11/18/2003	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card
	STREEFKERK et al. (081468-0306882)	10/719,683	11/24/2003	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card
	LOF et al. (081468-0306525)	10/705,816	11/12/2003	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Other: stamped receipt card
	SUWA et al. (Reissue Application of U.S. Patent No. 6,191,429 B1)	10/367,910	02/19/2003	<input checked="" type="checkbox"/> Specification <input checked="" type="checkbox"/> Drawings <input type="checkbox"/> Other: stamped receipt card

*The Examiner's initials adjacent a citation indicates he/she has considered the cited application relative to the subject application.

It is respectfully requested that these applications and the art cited therein during examination be expressly considered during the prosecution of this application and be made of record in this application. The identification of the above U.S. patent applications is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent.

PLEASE DO NOT PRINT the above information on the patent which results from this application.

Consideration of each listed application is earnestly solicited since unpublished patent applications are contemplated as IDS material; see the exception in Rule 98(a)(2)(iii) and note the penultimate sentence of MPEP 609.

Further, in keeping with MPEP 609, subsec. C(2), 2nd para., line 10 to end of the paragraph (especially note lines 18-25) **PLEASE RETURN A COPY OF THIS LETTER** with the Examiner's initials adjacent each above listing so that applicant will know that each listed application has been considered as required by PTO policy.

Secondly, please consider each enclosed document which is listed on the attached Form PTO-1449 and return a copy of that form with the Examiner's initials adjacent each citation. It is respectfully requested that these documents listed on the Form PTO-1449 be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed before the mailing date of the first Office Action on the merits in the present application. No certification or fee is required.

Respectfully Submitted,

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Atty. Dkt. No.	M#	Client Ref.
	309173	P-1583.010-US

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Applicant: DE SMIT et al.

Appln. No.: Unknown

Filing Date: April 8, 2004

Date: May 14, 2004 Page 1 of 3

Examiner: Unknown Group Art Unit: Unknown

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Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR	3,573,975	04/1971	DHAKA <i>et al.</i>	117	212	
	BR	3,648,587	03/1972	STEVENS	95	44	
	CR	4,346,164	08/1982	TABARELLI <i>et al.</i>	430	311	
	DR	4,396,705	08/1983	AKEYAMA <i>et al.</i>	430	326	
	ER	4,480,910	11/1984	TAKANASHI <i>et al.</i>	355	30	
	FR	5,040,020	08/1991	RAUSCHENBACH <i>et al.</i>	355	53	
	GR	5,121,256	06/1992	CORLE <i>et al.</i>	359	664	
	HR	5,610,683	03/1997	TAKAHASHI	355	53	
	IR	5,715,039	02/1998	FUKUDA <i>et al.</i>	355	53	
	JR	5,825,043	10/1998	SUWA	250	548	
	KR	5,900,354	05/1999	BATCHELDER	430	395	
	LR	6,191,429	02/2001	SUWA	250	548	
	MR	6,560,032	05/2003	HATANO	359	656	

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		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
						Enclosed	No	Enclose	No
	NR	EP 0023231	02/1981	EUROPE	TABARELLI <i>et al.</i>	X			
	OR	EP 0418427	03/1991	EUROPE	MIYAKE	X		X	
	PR	EP 1039511	09/2000	EUROPE	MURAKIMI <i>et al.</i>	X		X	
	QR	DD 224448	07/1985	GERMANY	HESSE <i>et al.</i>		X		
	RR	DD 242880	02/1987	GERMANY	KUCH		X		
	SR	FR 2474708	07/1981	FRANCE	LETELLIER		X		
	TR	JP 62-065326	03/1987	JAPAN	MORIUCHI	X			
	UR	JP 62-121417	06/1987	JAPAN	NAKAZAWA	X			
	VR	JP 63-157419	06/1988	JAPAN	NAKASUJI	X			
	WR	JP 04-305915	10/1992	JAPAN	OZEKI <i>et al.</i>	X			
	XR	JP 04-305917	10/1992	JAPAN	OZEKI <i>et al.</i>	X			

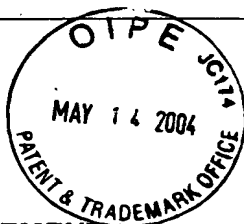
OTHER (Including in this order Author, Title, Periodical Name, Date, Pertinent Pages, etc.)

—YR	EP Search Report for EP 03253694.8 dated March 30, 2004			
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—AAR	M. SWITKES et al., "Immersion Lithography at 157 nm", J. Vac. Sci. Technol. B., Vol. 19, No. 6, November/December 2001, pp. 2353-2356			
—BBR	M. SWITKES et al., "Immersion Lithography: Optics for the 50 nm Node", 157 Anvers-1, September 4, 2002			

Examiner

Date Considered:

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



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of

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Examiner: Unknown

Group Art Unit: Unknown

U.S. PATENT DOCUMENTS

Examiner's Initials*		Document Number	Date MM/YYYY	Name (Family Name of First Inventor)	Class	Sub Class	Filing Date (if appropriate)
	AR	6,600,547	07/2003	WATSON <i>et al.</i>			
	BR	6,603,130	08/2003	BISSCHOPS <i>et al.</i>	250	492.1	
	CR	6,633,365	10/2003	SUENAGA	355	53	
	DR	2002/0163629	11/2002	SWITKES <i>et al.</i>	355	53	
	ER	2003/0123040	07/2003	ALMOGY	355	69	
	FR	2003/0174408	09/2003	ROSTALSKI <i>et al.</i>	359	642	
	GR	2004/0000627 A1	01/2004	SCHUSTER			
	HR	2004/0021844 A1	02/2004	SUENAGA			
	IR	2004/0075895 A1	04/2004	LIN	359	380	

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		Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
						Enclosed	No	Enclose	No
	JR	JP 06-124873	05/1994	JAPAN	TAKAHASHI	X		X	
	KR	JP 07-220990	08/1995	JAPAN	FUKUDA <i>et al.</i>	X			
	LR	JP 10-228661	08/1998	JAPAN	KUROKAWA	X			
	MR	JP 10-255319	09/1998	JAPAN	SUENAGA <i>et al.</i>	X			
	NR	JP 10-303114	11/1998	JAPAN	SUWA	X		X	
	OR	JP 10-340846	12/1998	JAPAN	KUDO	X		X	
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	QR	JP 07-132262	05/1995	Japan	HIRAKAWA <i>et al.</i>	X			
	RR	JP 58-202448	11/1983	Japan	KAWAMURA <i>et al.</i>	X			
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—	WR	B.J. LIN, "Proximity Printing Through Liquid", IBM Technical Disclosure Bulletin, Vol.20, No. 11B, April 1978, p. 4997				
	XR	B.J. LIN, "The Paths To Subhalf-Micrometer Optical Lithography", SPIE Vol. 922, Optical/Laser Microlithography (1988), pp. 256-269				
—	YR	G.W.W. STEVENS, "Reduction of Waste Resulting from Mask Defects", Solid State Technology, August 1978, Vol.21 008, pp. 68-72				
—	ZR	S. OWA et al., "Immersion Lithography; its potential performance and issues", SPIE Microlithography 2003, 5040-186, February 27, 2003				
—	AAR	S. OWA et al., "Advantage and Feasibility of Immersion Lithography", Proc. SPIE 5040 (2003)				

Examiner

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Examiner: Unknown	Group Art Unit: Unknown

Date: May 14, 2004 Page 3 of 3

U.S. PATENT DOCUMENTS

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AR						
BR						

FOREIGN PATENT DOCUMENTS

	Document Number	Date MM/YYYY	Country	Inventor Name	English Abstract		Translation Readily Available	
					Enclosed	No	Enclose	No
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DR	DD 221 563	04/1985	GERMANY	PFORR et al.		X		
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FR	Nikon Precision Europe GmbH, "Investor Relations - Nikon's Real Solutions", May 15, 2003							
GR	H. KAWATA et al., "Optical Projection Lithography using Lenses with Numerical Apertures Greater than Unity", Microelectronic Engineering 9 (1989), pp. 31-36							
HR	J.A. HOFFNAGLE et al., "Liquid Immersion Deep-Ultraviolet Interferometric Lithography", J. Vac. Sci. Technol. B., Vol. 17, No. 6, November/December 1999, pp. 3306-3309							
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OR	H. HATA, "The Development of Immersion Exposure Tools", Litho Forum, International SEMATECH, Los Angeles, January 27-29, 2004, Slide Nos. 1-22							
PR	T. MATSUYAMA et al., "Nikon Projection Lens Update", SPIE Microlithography 2004, 5377-65, March, 2004							
QR	"Depth-of-Focus Enhancement Using High Refractive Index Layer on the Imaging Layer", IBM Technical Disclosure Bulletin, Vol. 27, No. 11, April 1985, p. 6521							
RR	A. SUZUKI, "Lithography Advances on Multiple Fronts", EEdesign, EE Times, January 5, 2004							
SR	B. LIN, "The k_3 coefficient in nonparaxial NA scaling equations for resolution, depth of focus, and immersion lithography, J. Microlith., Microfab., Microsyst. 1(1):7-12 (2002)							
TR								

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